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U. S. Department of Agriculture - Forest Service
CENTRAL STATES FOREST EXPERIMENT STATION
In Cooperation With
Ohio Agricultural Experiment Station
DEPARTMENT OF FORESTRY

Technical Note 53.

December 1, 1941

VOLUME TABLE^{1/}

for
NORTHERN RED AND SCARLET OAKS
(*Quercus borealis* and *Q. coccinea*)
Franklin County, Ohio

Merchantable Stem to a Variable Top Diameter						INTERNATIONAL Rule ($\frac{1}{4}$ " Kerf)	
Diameter breast high outside bark (inches)	Gross volume of stem in 12.3-foot logs to merchantable height					Top d.i.b. at merchantable limit	Basis in trees
	1	2	3	4	5		
	log	logs	logs	logs	logs		
	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches	Number
8	16	29				6.4	2
9	21	38				6.9	1
10	27	48	63			7.3	5
11	34	60	84			7.7	5
12	41	74	103			8.2	6
13	52	89	124			8.6	7
14	59	105	147			9.1	5
15	69	123	173	219	264	9.6	3
16	80	143	200	255	306	10.2	7
17	92	164	231	292	352	10.7	5
18	105	188	263	334	403	11.3	4
19	120	213	298	378	456	11.9	4
20	135	240	336	427	513	12.4	8
21	151	268	376	478	574	13.1	4
22	168	298	419	532	640	13.7	1
23	186	331	463	589	710	14.3	7
24	206	366	512	650	783	15.0	3
25	226	402	562	714	859	15.6	6
26	247	440	617	783	942	16.3	3
27	270	480	673	853	1028	17.0	1
28			731	929	1119	17.7	1
29			792	1007	1213	18.4	1
30				1089	1312	19.1	-
31				1175	1416	19.8	2
32				1265	1524	20.6	3
33				1358	1637	21.3	-
34				1455	1754	22.0	1
35				1556	1875	22.8	-
36				1660	2000	23.6	-
37				1770	2128	24.4	3
38				1884	2265	25.2	-
39				2000	2404	26.0	-
40				2118	2553	26.7	-
41				2244	2704	27.5	1
42				2317	2858	28.3	-
43				2506	3020	29.0	1

Basis in trees-- number	5	29	29	27	10	--	100
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1/ Trees climbed and measured by personnel of Work Projects Administration
Official Project 65-1-42-166 - "The Ohio Woodland Survey." Measurements taken

at 12-foot log lengths above a 1.0-foot stump height. Scaled as 12-foot logs, and additional shorter top logs; top sections less than 8 feet in length scaled as fractions of an 8-foot log. Table prepared in 1941, by the equation method. Coefficient of multiple correlation (R) = .984. The band of the standard error of estimate is 82.0% to 122.3%. Block shows limits of basic data which include 84 red oak and 16 scarlet oak.

The total estimated gross volume of single black oak trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the cull elements and through local experience of millmen as regards losses from rot, shake, etc., in utilizing this species.

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